

TOPFLEX

SUPER-FLEX RUBBER EXPANSION JOINT

With Floating Flanges (For Vacuum and Underground Service)

Fig. STS



TOPFLEX Series STS are designed for tough demanding industrial applications. As found in :
Air Conditioning-Heating and Ventilating Systems, Chemical-Petrochemical and Industrial Process
Piping Systems, Power Generating Systems, Marine Service, Pulp&Paper Systems, Water-Wastewater
Sewage and Pollution Control Systems. Installed next to mechanical equipment or between the
anchor points of piping system, specify the TOPFLEX SERIES STS to :

- | | |
|----------------------------------|--|
| (1) Absorb Pipe/Movement/Stress. | (4) Compensate alignment/offset. |
| (2) Decrease Systems Noise. | (5) Eliminate Electrolysis. |
| (3) Isolate Vibration. | (6) Protect Against Start up/Surge Forces. |

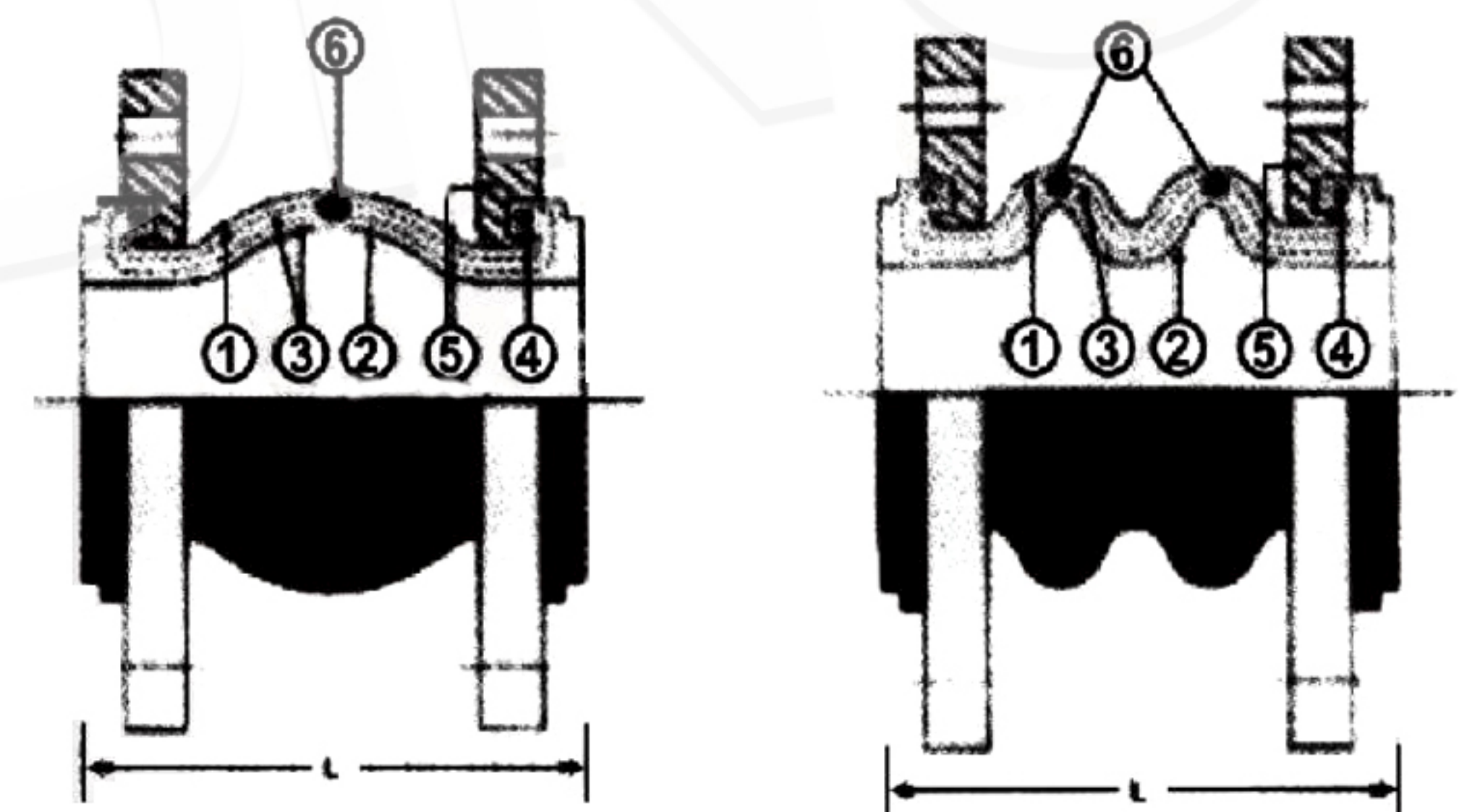
MATERIALS

ITEM NO.	DESCRIPTION	MATERIAL
1	Outer Cover	Synthetic Rubber (EPDM)
2	Inner Tube	Synthetic Rubber (EPDM)
3	Reinforcing Fabric	Synthetic Fiber
4	Wire	Carbon Steel wire
5	Flange	Mild Steel / Stainless Steel
6	Reinforcing Ring	Carbon Steel

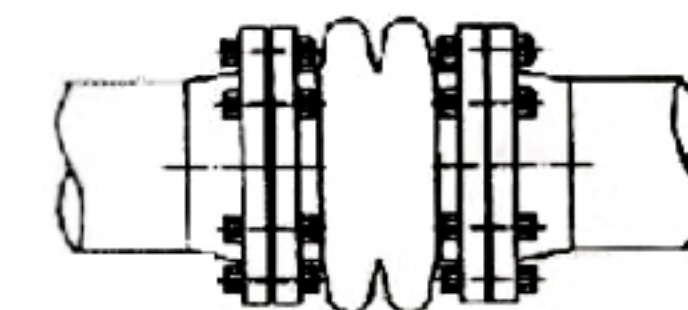
* Optional Material : Flange = Stainless Steel and Elastomer Outer & Inner = NBR

TECHNICAL CONDITION

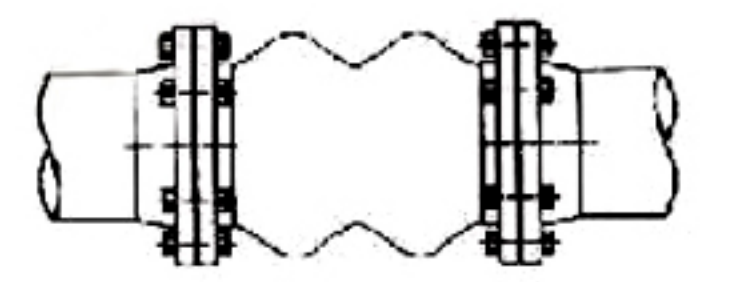
Model	STS	
Size I.D.	1" - 12"	14" - 24"
Working Pressure	300 psi	150 psi
Burst Pressure	854 psi	342 psi
Vacuum Rating	750 mm/Hg	
Temperature	- 20°C to 100°C	



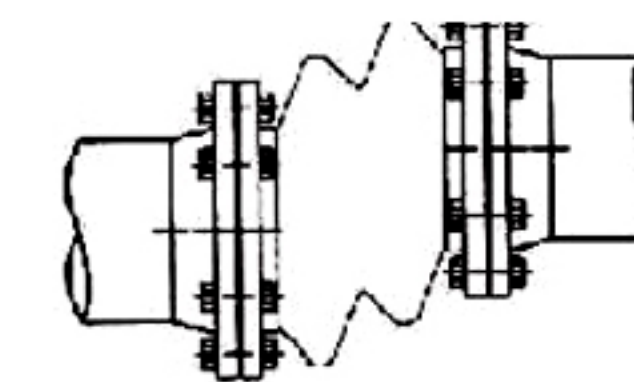
The arch reinforcing ring is incorporated for the buried or vacuum services.



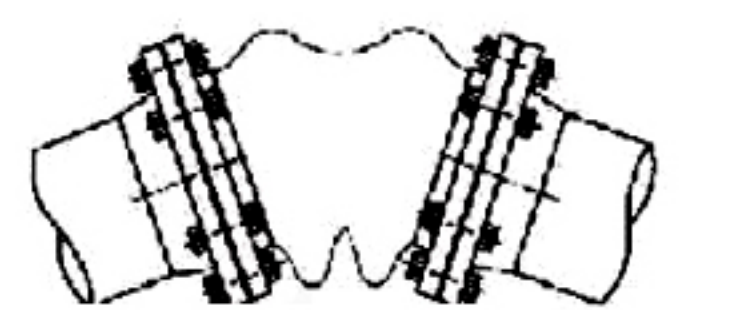
Axial Compression



Axial Extension



Lateral Movement



Angular Deflection

TABLE OF MAIN PARAMETERS OF NORMAL CORE DIAMETER, LENGTH, DISPLACEMENT VALUE

Normal core diameter		Single-Sphere					Twin-Sphere				
(mm)	(inch.)	Length	Compression	Extension	Lateral	Angular	Length	Compression	Extension	Lateral	Angular
25	(1)	95	8	4	8	15°	-	-	-	-	-
32	(1.1/4)	95	8	4	8	15°	-	-	-	-	-
40	(1.1/2)	95	8	4	8	15°	175	50	30	50	35°
50	(2)	105	8	5	8	15°	175	50	30	50	35°
65	(2.1/2)	115	12	6	10	15°	175	50	30	50	35°
80	(3)	130	12	6	10	15°	175	50	30	50	35°
100	(4)	135	20	20	20	15°	225	50	30	50	35°
125	(5)	170	20	20	20	15°	225	50	30	50	35°
150	(6)	180	20	20	20	15°	225	50	30	50	35°
200	(8)	205	20	20	20	15°	325	60	30	50	30°
250	(10)	240	20	20	20	15°	325	60	30	50	30°
300	(12)	260	20	20	20	15°	325	60	30	50	30°
350	(14)	265	30	25	20	15°	350	50	40	50	20°
400	(16)	265	30	25	20	15°	350	50	40	50	20°
450	(18)	265	30	25	20	15°	350	50	40	50	20°
500	(20)	265	30	25	20	15°	350	50	40	50	20°
600	(24)	254	30	25	20	15°	350	50	40	50	20°

- NOTE :**
1. Standard material is EPDM. The products are not applicable to oil. Other kinds of rubber material are optional.
 2. Standard rated working pressure is 20 bars (up to 300 mm.) to 10 bars (for larger size than 300 mm.)
 3. Applicable fluids : Air, Compressed air, water, sea water, hot water, weak acid, alkalis, etc.
 4. Flange drilling : JIS, DIN, ANSI, BS and other standard drilling for your specification.
 5. Tolerances for installation should not over 30% of Allowable movements.